

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/758,858	01/11/2001	Mark David Hoffbeck	1324	9590		
27310 7.	590 03/12/2002					
PIONEER HI-BRED INTERNATIONAL INC.			EXAMINER			
7100 N.W. 62ND AVENUE			FOX, DAVID T			
P.O. BOX 1000	0		1071, 27	11101		
JOHNSTON, IA 50131			ART UNIT	PAPER NUMBER		
			1638	¥		
			DATE MAILED: 03/12/2002	1		

Please find below and/or attached an Office communication concerning this application or proceeding.

					
Office Action Summary	Application No		icant(s) Ho A	Beck	
	Examiner	Fox		Group Art Unit	
The MAILING DATE of this communication appe	ears on the cover	sheet beneat	th the corr	espondence a	ddress-
Period for Reply	•	2			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET OF THIS COMMUNICATION.	TO EXPIRE	M	ONTH(S) F	ROM THE MAI	LING DATE
 Extensions of time may be available under the provisions of 37 CFF from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a If NO period for reply is specified above, such period shall, by defau Failure to reply within the set or extended period for reply will, by sta 	reply within the statut	ory minimum of t	hirty (30) day	ys will be consider	ed timely.
Status					
☐ Responsive to communication(s) filed on					
☐ This action is FINAL.		-			<u> </u>
□ Since this application is in condition for allowance excep accordance with the practice under Ex parte Quayle, 19	ot for formal matter 935 C.D. 1 1; 453 C	rs, prosecutio D.G. 213.	n as to th	e merits is clos	sed in
Disposition of Claims					
□ Claim(s)			_ is/are per	ding in the app	lication.
Of the above claim(s)	<u></u>	is/are withdrawn from consideration.			
☐ Claim(s)		io/oro alla	امميا		
Claim(s) 1-49		is/are reje	cted.		
□ Claim(s)		is/are objected to.			
□ Claim(s)		are subject to restriction or election			
Application Papers			requireme		
☐ See the attached Notice of Draftsperson's Patent Drawin	na Review. PTO-94	48.			
☐ The proposed drawing correction, filed on			pproved.		
☐ The drawing(s) filed on is/are objection	cted to by the Exa	miner.	••		
☐ The specification is objected to by the Examiner.					
$\hfill\Box$ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. § 119 (a)-(d)					
 □ Acknowledgment is made of a claim for foreign priority u □ All □ Some* □ None of the CERTIFIED copies of □ received. 			en		
 □ received in Application No. (Series Code/Serial Numb □ received in this national stage application from the Int 	er) ernational Bureau	(PCT Rule 1 7	7,2(a)).		
*Certified copies not received:					
uttachment(s)				•	
☑ Information Disclosure Statement(s), PTO-1449, Paper N	yo(s) 2	□ Intensies	v Cummon	, PTO-413	
Notice of Reference(s) Cited, PTO-892	(0).		-		on DTO 450
□ Notice of Draftsperson's Patent Drawing Review, PTO-92			Patent Application		
3. Diamopologico i alein Diaming Heview, F10-92	1 0	□ Other			

Office Action Summary

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

Part of Paper No.

Application/Control Number: 09/758,858

Art Unit: 1638

Applicants' intent on page 44 of the specification to deposit under all of the conditions of 37 CFR 1.801-1.809 is acknowledged.

Claims 1, 6, 21, 25, 37 and 40 are objected to for their inclusion of blanks "_____". It is assumed that the blanks will be replaced by the ATCC deposit accession number.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 5, 14, 16, 19, 20, 22, 24, 33, 35, 41, 43, 45, 46 and 48-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 22 are indefinite in their recitation of "wherein said plant is male sterile" which is confusing, since the claims from which they depend are not drawn to a male sterile plant.

Replacement of the phrase with --further comprising a genetic factor conferring male sterility--would obviate this rejection.

Claims 5 and 24 are indefinite in their recitation of "the...protoplasts" which lacks antecedent basis in the claims from which they depend. Deletion of "the" before "cells" in line 1, and insertion of --of the tissue culture-- after "protoplasts" in line 1, would obviate this rejection.

Claims 14, 33, 41, 45 and 46 are indefinite in their recitation of "high", "above average", "very good", "below average" and "adapted" which are unduly narrative and so fail to clearly

Application/Control Number: 09/758,858 Page 3

Art Unit: 1638

characterize the degree of expression of the claimed trait or the claimed maize plant exhibiting the trait.

Claims 14, 33, 41, 45 and 46 are indefinite in their recitation of improper Markush terminology. See MPEP 2173.05(h). Insertion of --and-- before "adapted" would obviate this rejection.

Claims 16 and 35 are indefinite in their recitation of "[t]he maize plant breeding program" since the claims from which they depend are drawn to methods rather than breeding programs.

Replacement of the phrase with "[t]he method" would obviate this rejection.

Claims 19-20 and 48-49 are indefinite in their recitation of "[t]he single gene conversion(s) of claim" since the preceding claims are drawn to maize plants rather than single gene conversions. Replacement of "conversion(s)" with --conversion--, and insertion of --maize plant--after "conversion", would obviate this rejection.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Application/Control Number: 09/758,858

Art Unit: 1638

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 14, 33, 43 and 45-46 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Morgan (U.S. 5,824,848).

The claims are drawn to maize plants exhibiting two traits and which are derived from the exemplified maize inbred following an unspecified number of crosses for an unspecified number of generations with other plants of unspecified genetic complements, wherein at least one parent was the exemplified maize plant.

Morgan teaches an inbred maize plant developed in Iowa with high yield and adapted to the Central Corn Belt region of the United States (see, e.g., columns 11-12, Tables 1-2). The plant taught by Morgan differs from the claimed plant only in the derivation from a particular maize parent. However, the method of making the maize plant would not confer a unique characteristic to the resultant plant which would distinguish it from the prior art plant, given the loss of parental genotypic contribution with each outcross. See *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985), which teaches that a product-by-process claim may be properly rejectable over prior art teaching the same product produced by a different process, if the process of making the product fails to distinguish the two products.

Claims 1-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U.S. 5,824,848).

Morgan teaches an inbred Dent maize plant with yellow endosperm, pink silk, red anther, green glume, green-yellow silk, red cob and curved row direction (see, e.g., Table 4, columns 14-

Application/Control Number: 09/758,858

Art Unit: 1638

15), wherein the plant was developed by crossing other breeding lines exhibiting desirable traits, wherein tissue culture or genetic engineering may be further employed to introduce other traits, and wherein the inbred can be used to produce other desirable hybrids (see entire patent).

Morgan does not teach a maize plant with dark green leaves.

It would have been obvious to one of ordinary skill in the art to utilize the maize plant taught by the reference and to modify that plant by breeding with other maize plants to incorporate other desirable agronomic traits, as suggested by the reference.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (703) 308-0280. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached on (703) 306-3218. The fax phone number for this Group is (703) 872-9306. The after final fax phone number is (703) 872-9307.

March 11, 2002

DAVID T. FOX

PRIMARY EXAMINER
GROUP 180-(638